Micro-IP Camera type cube

XIP-Q01 LEOPARD

User’s Manual

Ver. 1.2

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1. Overview

The Micro-camera IP type bucket full HD LEOPARD, Camera is an easy setup camera with PoE supported to reduce complicate cabling. The IP Camera has built-in microphone and speaker which allows two-way audio communication. 2 Megapixel Resolution is supported for providing high definition images. Quad Streams Compression (H.264 Baseline / Main / High Profile + MJPEG) are available for efficient bandwidth and storage management. For low light situations, the IP Camera has incorporated Day/Night ICR technologies to capture clear images.

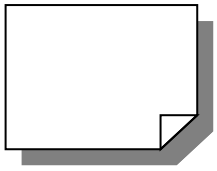
1.1 Features

- Progressive Scan CMOS Sensor
- 2M Resolution
- Quad Stream Support
- Dual stream- Full HD 1080P Real-Time + D1 Real-Time
- Quad Stream Compression- H.264 Baseline / Main / High Profile + MJPEG
- Multi-language Support
- Wide Dynamic Range
- Built-In Microphone and Speaker*
- Motion Detection
- Privacy Masks
- Smart Picture Quality / 3D Noise Reduction
- Smart IR Mode
- Day/Night (ICR)
- IR LED Module (working distance up to 5m)*
- microSD Support
- ONVIF Support

(*) Optional

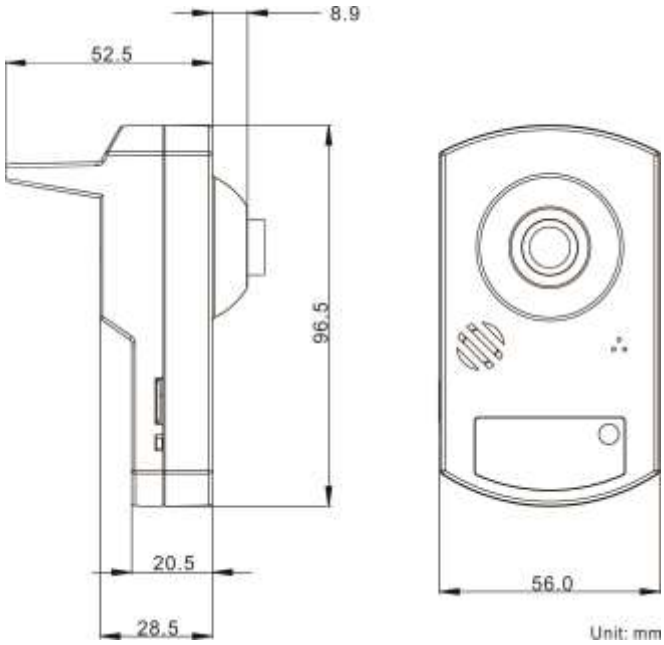
1.2 Package Contents

Please check the package contains the following items listed below.

<table>
<tr><td colspan="2"> 
Full HD Multiple Stream
Micro-camera IP LEOPARD (PoE)</td></tr>
<tr><td> 
Quick Guide</td><td> 
CD
(bundled software and documentation)</td></tr>
</table>

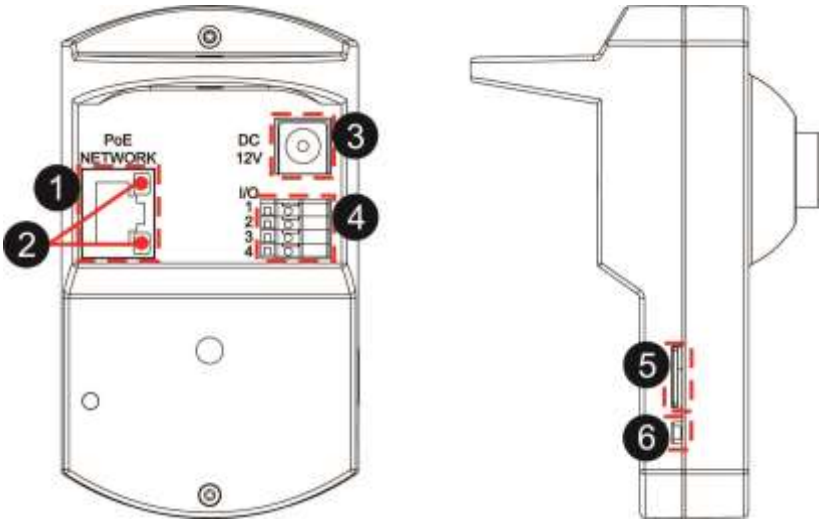
1.3 Dimensions

The dimensions of the IP Camera are shown below.



1.4 Connectors

The diagrams below show the connectors of the IP Camera. Definition for each connector is also given as follows.



No.	Connector	Definition	
1	PoE NETWORK	For Ethernet cable and PSE connection	
2	Network LEDs	Network connection and activity indication	
3	DC 12V Connector	For power connection	
4	Alarm I/O	1	Alarm Output +
		2	Alarm Output −
		3	Alarm Input +
		4	Alarm Input −
5	microSD Card Slot	For videos and snapshots storage	
6	Default Button	Press the button with a proper tool for at least 20 seconds to restore the system.	

2. Camera Cabling

Please follow the instructions below to complete IP Camera connection.

2.1 Connect Power

For power connection, please refer to section Connectors. Alternatively, users can power the camera by PoE. Use an Ethernet cable and connect it to the camera and a PoE switch.

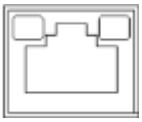
NOTE: If PoE is used, make sure Power Sourcing Equipment (PSE) is in used in the network.

2.2 Connect Ethernet Cable

To have best transmission quality, cable length shall not exceed 100 meters. Connect one end of the Ethernet cable to the PoE Network connector of the IP Camera, and plug the other end of the cable to the network switch or PC.

NOTE: In some cases, Ethernet Crossover cable might be needed when connecting the IP Camera directly to the PC.

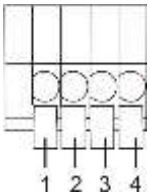
Check the status of the link indicator and activity indicator LEDs. If the LEDs are unlit, please check the LAN connection.



Green Link Light indicates good network connection.
Orange Activity Light flashes for network activity indication.

2.3 Connect Alarm I/O

The camera equips one alarm input and one relay output for alarm application. Refer to alarm pin definition below to connect alarm devices to the IP Camera if needed.



PIN 1: Output +
PIN 2: Output −
PIN 3: Input +
PIN 4: Input −

3. System Requirements

To perform the IP Camera via web browser, please ensure the PC is in good network connection, and meet system requirements as described below.

Items	System Requirement
Personal Computer	1. Intel® Pentium® M, 2.16 GHz or Intel® Core™2 Duo, 2.0 GHz 2. 2 GB RAM or more
Operating System	Windows VISTA / Windows XP / Windows 7
Web Browser	Microsoft Internet Explorer 6.0 or later Firefox Chrome Safari
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
Viewer	ActiveX control plug-in for Microsoft IE

4. Access Camera

For initial access to the IP Camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in “DeviceSearch” folder in the supplied CD.

Accessing the Camera by Device Search Software

Step 1: Double click on the program Device Search.exe.

Step 2: After its window appears, click on the <Device Search> button on the top. All the finding IP devices will be listed in the page.

Step 3: Find the camera in the list by its IP address and click on it. The default IP address of the camera is: **192.168.0.250**.

Step 4: The default IP address of the camera may not be in the same LAN as the IP address of the PC. If so, the IP address of the camera needs to be changed. Right click on the camera and click <Network Setup>. Meanwhile, record the MAC address of the camera, for future identification.

Step 5: The <Network Setup> page will come out. Select <DHCP> and click <Apply> down the page. The camera will be assigned with a new IP address.

Step 6: Click <OK> on the Note of setting change. Wait for one minute to re-search the camera.

Step 7: Click on the <Device Search> button to re-search all the devices. Find the camera in the list by its MAC address. Then double click or right click and select <Browse> to access the camera directly via a web browser.

Step 8: A prompt window requesting for default username and password will appear. Enter the default username and password shown below to login to the camera.

Login ID	Password
Admin	1234

NOTE: ID and password are case sensitive.

NOTE: It is strongly advised that administrator's password be altered for the security concerns. Refer to Full HD Multiple Streams IP Camera Menu Tree for further details.

Installing DC Viewer Software Online

For initial access to the IP Camera, a client program, DC Viewer, will be automatically installed on the PC when connecting to the IP Camera.

If the Web browser does not allow DC Viewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (refer to chapter Appendix C: Setup Internet Security) to continue the process.

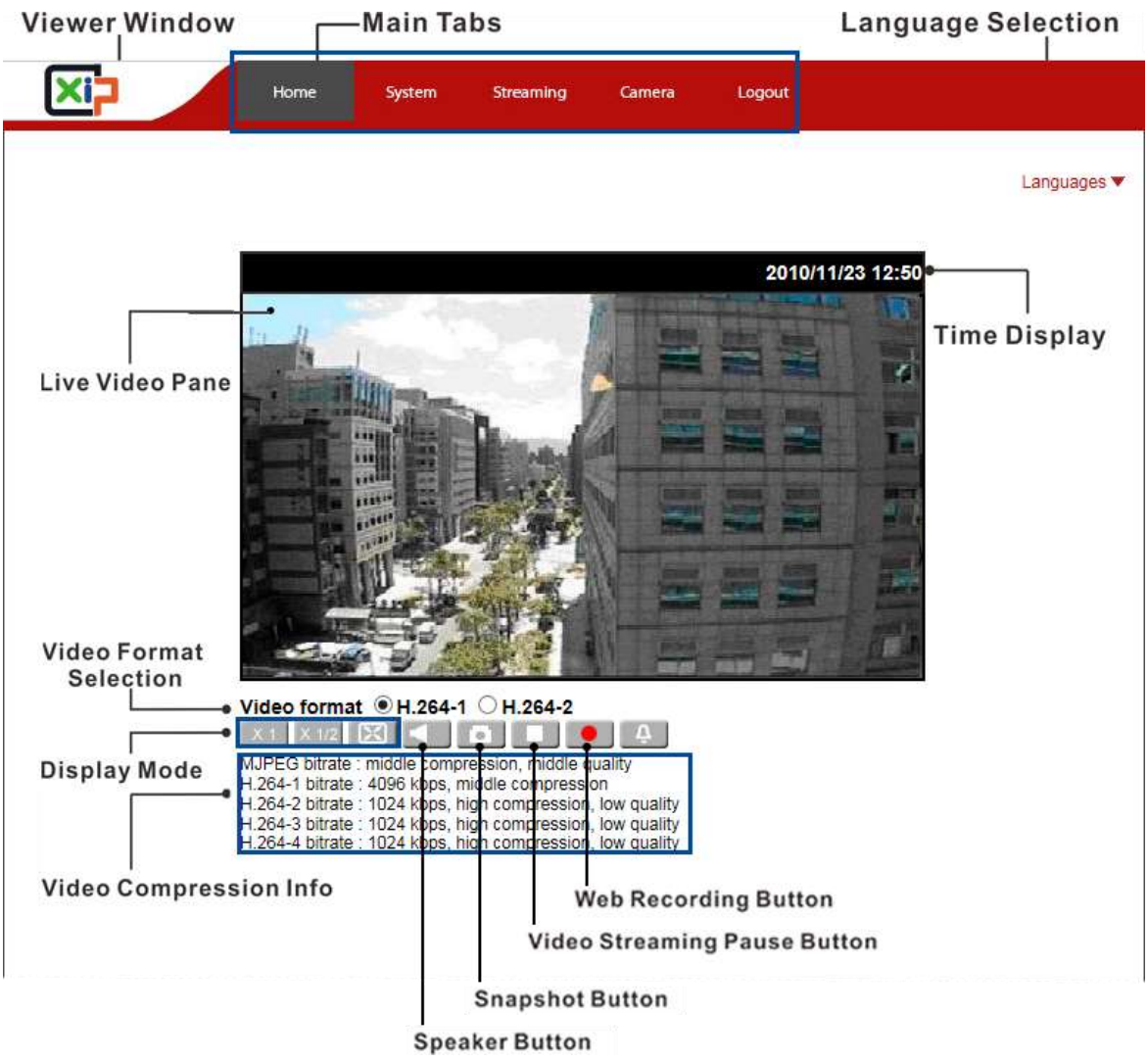
The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser. Right click on the Information Bar and select <Install ActiveX Control…> to allow the installation.
The download procedure of DC Viewer software is specified as follows.

Step 1: In the DC Viewer installation window, click on <Next> to start installation.

Step 2: The status bar will show the installation progress. After the installation is completed, click on <Finish> to exit the installation process.

Step 3: Click on <Finish> to close the DC Viewer installation page.

Once the DC Viewer is successfully installed, the IP Camera's Home page will be able to correctly display as the figure below.

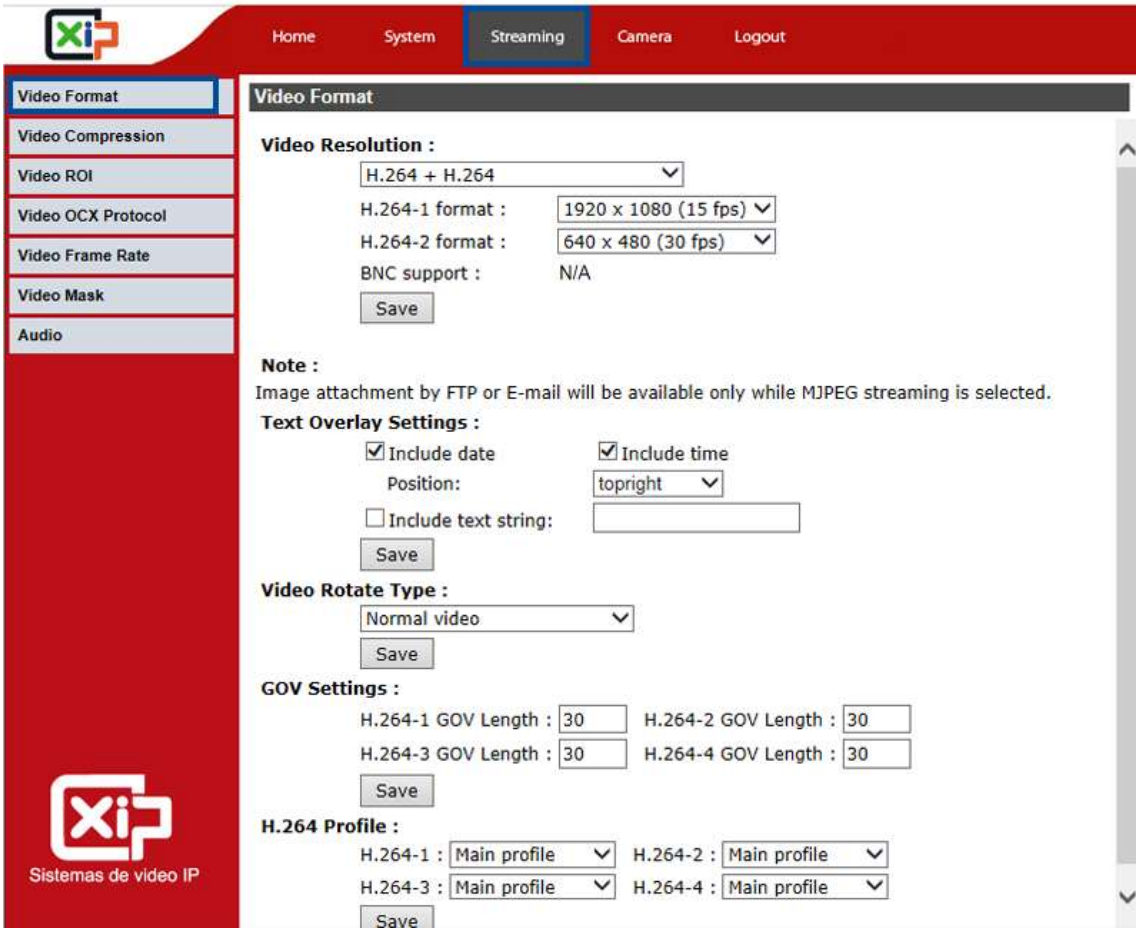


Note: Please refer to Full HD Multiple Stream IP Camera Menu Tree for more button function detail.

5. Setup Video Resolution

Users can setup video resolution on the Video Format page of the user-friendly browser-based configuration interface.

Video Format can be found under this path: **Streaming> Video Format**.



The default value of video resolution is as below.

2M	H.264- 1920 x 1080 (30 fps) + H.264- 720 x 480 (30 fps)

For more video resolution combination details, please refer to Full HD Multiple Stream IP Camera Menu Tree.

6. Configuration Files Export / Import

To export / import configuration files, users can access the Maintenance page on the user-friendly browser-based configuration interface.

The Maintenance setting can be found under this path: **System> Maintenance**.

Users can export configuration files to a specified location and retrieve data by uploading an existing configuration file to the IP Camera. This is especially convenient to make multiple cameras having the same configuration.

Export

Users can save the system settings by exporting the configuration file (.bin) to a specified location for future use. Click on the <Export> button, and the popup File Download window will come out. Click on <Save> and specify a desired location for saving the configuration file.

Upload

To upload an existing configuration file to the IP Camera, please first click on <Browse> to select the configuration file, and then click on the <Upload> button for uploading.

Appendix A: Technical Specifications

Camera		**2M**
Image Sensor		1/2.7” Progressive CMOS
Effective Pixels		1920 (H) x 1080 (V)
Minimum Illumination		TBD
White Balance		Manual / AWB / ATW
Shutter Speed		1 ~ 1/10000 sec.
Lens		
Focal Length		2.8 mm / 3.6 mm / 4.0 mm
F Number		2.8 mm- F2.0 / 3.6 mm- F1.8 / 4.0 mm- F1.5
Operation		
Multiple Languages		English / French / German / Italian / Korean / Simplified Chinese / Traditional Chinese / Russian / Portuguese / Spanish / Japanese
Image Setting	Backlight Compensation	On / Off
	White Balance	Auto / Manual / ATW / One Push
	Noise Reduction (3D)	On / Off
	Wide Dynamic Range	On / Off
	Privacy Mask	On / Off
	Brightness	Manual
	Exposure	Auto / Manual
	Sharpness	Manual
	Contrast	Manual
	Saturation	Manual
	Hue	Manual
	Digital Zoom	Support
	Motion Detection	On / Off / By Schedule
	Privacy Mask Type	Color
	ICR	Auto / On / Off / Smart
	ICR + IR LED*	Auto / LED On / LED Off / Smart IR / Light Sensor
	Tampering Alarm	On / Off / By Schedule
Audio	Two-way Audio	Built-In Microphone and Speaker*
	Compression	G.711 / G.726
Network		
Interface		RJ-45, 10/100 Mbps
Video Compression		H.264 (MJPEG-4 Part 10 / AVC) / MJPEG
Video Streaming		Dual Streams- H.264 + H.264 / H.264 + MJPEG Quad Streams- H.264 x 4 / H.264 x 3 + MJPEG
Video Resolution		H.264- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Frame Rate		Single Stream- 1080P (25/30 fps) Dual Streams- 1080P (13/15 fps) + 720P (25/30 fps)
Protocol		IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF, ARP
Security / Authorization		HTTPS / IP Filter / IEEE 802.1X
Alarm	Input	1 Set, 5V 10kΩ pull up
	Output	1 Set, Photo Relay Output 300V DC/AC
Event Notification		HTTP / FTP / SMTP
microSD		microSDHC 32GB support
Supported Web Browser		Internet Explorer (6.0+) / Chrome / Firefox / Safari
User Account		20
Password Levels		User and Administrator
Mechanical		
Built-in IR Illuminator*	Working distance	up to 5 m
	Wavelength	850 nm
	Number of LEDs	2
Power Connection		PoE / DC Jack
LED Indicator		Power / Link / ACT
Connectors	Alarm	4 Pin Terminal Block (Female)

	Power	DC Jack
	Ethernet	RJ-45

General		
Operating Temperature		-10°C ~ 50°C (14°F ~ 122°F)
Humidity		10% ~ 90%, No Condensation
Dimension		96.5 x 56.0 x 61.4 mm (3.8 x 2.2 x 2.4 in.)
Weight		120 g
Power Source		PoE / DC 12V
Power Consumption	System	3 W
	Built-In IR Illuminator	+0.8 W
Regulatory		CE / FCC / RoHS

(*) Optional

Camera		**2M Real-Time**
Image Sensor		1/2.7” Progressive CMOS
Effective Pixels		1920 (H) x 1080 (V)
Minimum Illumination		TBD
White Balance		Manual / AWB / ATW
Shutter Speed		1 ~ 1/10000 sec.
Lens		
Focal Length		2.8 mm / 3.6 mm / 4.0mm
F Number		2.8mm- F2.0 / 3.6 mm- F1.8 / 4.0mm- F1.5
Operation		
Multiple Languages		German / English / Spanish / French / Italian / Japanese / Korean / Portuguese / Russian / Simplified Chinese / Traditional Chinese
Image Setting	Backlight Compensation	On / Off
	White Balance	Auto / Manual / ATW / One Push
	Noise Reduction (3D)	On / Off
	Wide Dynamic Range	On / Off
	Privacy Mask	On / Off
	Brightness	Manual
	Exposure	Auto / Manual
	Sharpness	Manual
	Contrast	Manual
	Saturation	Manual
	Hue	Manual
	Digital Zoom	Support
	Motion Detection	On / Off / By Schedule
	Privacy Mask Type	Color
	ICR	Auto / On / Off / Smart
	ICR + IR LED*	Auto / LED On / LED Off / Smart IR / Light Sensor
	Tampering Alarm	On / Off / By Schedule
Audio*	Two-way Audio	Built-In Microphone and Speaker*
	Compression	G.711 / G.726
Network		
Interface		RJ-45, 10/100 Mbps
Video Compression		H.264 / MJPEG
Video Streaming		Dual Streams- H.264 + H.264 / H.264 + MJPEG Quad Streams- H.264 x 4 / H.264 x 3 + MJPEG
Video Resolution		H.264- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Frame Rate		Dual Streams- 1080P (30/25 fps) + D1 (30/25 fps)
Protocol		IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF, ARP
Security / Authorization		HTTPS / IP Filter / IEEE 802.1X
Alarm	Input	1 Set, 5V 10kΩ pull up
	Output	1 Set, Photo Relay Output 300V DC/AC
Event Notification		HTTP / FTP / SMTP
microSD		microSDHC 32GB support
Supported Web Browser		Internet Explorer (6.0+) / Chrome / Firefox / Safari
User Account		20
Password Levels		User and Administrator
Mechanical		
Built-in IR Illuminator*	Working distance	up to 5m
	Wavelength	850 nm
	Number of LEDs	2
Power Connection		PoE / DC Jack
LED Indicator		Power / Link / ACT
Connectors	Alarm	4 Pin Terminal Block (Female)
	Power	DC Jack
	Ethernet	RJ-45

General		
Operating Temperature		-10°C ~ 50°C (14°F ~ 122°F)
Humidity		10% ~ 90%, No Condensation
Dimension		96.5 x 56.0 x 61.4 mm (3.8 x 2.2 x 2.4 in.)
Weight		120 g
Power Source		PoE / DC 12V
Power Consumption	System	3 W
	Built-In IR Illuminator	+0.8 W
Regulatory		CE / FCC / RoHS

(*) Optional

Appendix B: Delete the Existing DC Viewer

For users who have installed DC Viewer in the PC previously, please first remove the existing DC Viewer from the PC before accessing to the IP Camera.

Deleting the DC Viewer

In the Windows <Start Menu>, activate <Control Panel>, and then double click on <Add or Remove Programs>. In the <Currently installed programs> list, select <DCViewer> and click on the button <Remove> to uninstall the existing DC Viewer.

Deleting Temporary Internet Files

To improve browser performance, it is suggested to clean up all the files in the Temporary Internet Files. The procedure is as follows.

Step 1: In the web browser, click on the <Tools> tab on the menu bar and select <Internet Options>.

Step 2: Click on the <Delete> button under <Browsing history> section. In the appeared window, tick the box beside the <Temporary Internet Files>.

Step 3: Click on <Delete> to start deleting the files.

Appendix C: Setup Internet Security

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

Internet Security Level: Default

Step 1: Start the Internet Explorer (IE).

Step 2: Click on the <Tools> tab on the menu bar and select <Internet Options>.

Step 3: Click on the <Security> tab, and select <Internet> zone.

Step 4: Down the page, click on the <Default Level> button, and click on <OK> to confirm the setting. Close the browser window, and restart a new one later to access the IP Camera.

ActiveX Controls and Plug-ins Settings

Step 1: Repeat **Step 1 to Step 3** of the previous section above.

Step 2: Down the page, click on the <Custom Level> button to change ActiveX controls and plug-ins settings. The Security Settings window will pop up.

Step 3: Under <ActiveX controls and plug-ins>, set **ALL** items (as listed below) to <Enable> or <Prompt>. Please note that the items vary by IE version.

ActiveX controls and plug-ins settings:

1. Binary and script behaviors.
2. Download signed ActiveX controls.
3. Download unsigned ActiveX controls.
4. Allow previously unused ActiveX controls to run without prompt.
5. Allow Scriptlets.
6. Automatic prompting for ActiveX controls.
7. Initialize and script ActiveX controls not marked as safe for scripting.
8. Run ActiveX controls and plug-ins.
9. Only allow approved domains to use ActiveX without prompt.
10. Script ActiveX controls marked safe for scripting*.
11. Display video and animation on a webpage that does not use external media player.

Step 4: Click on <OK> to accept the settings. A prompt window will appear for confirming the setting changes, click <Yes(Y)> and close the Security Settings window.

Step 5: Click on <OK> to close the Internet Options screen.

Step 6: Close the browser window, and restart a new one later to access the IP Camera.